

Kansas City Power & Light Company SO₂ Emission Allowance Management Policy

**** Denotes Highly Confidential Information ****

Introduction

The purpose of the SO₂ Emission Allowance Management Policy (SEAMP) is to set out the approach, guidelines, trading parameters, and reporting requirements that Kansas City Power & Light Company (KCPL) will utilize to manage its SO₂ emission allowance inventory. Specifically, this policy is structured to achieve the following three objectives:

Objective 1: Manage “banked” (past vintage), current and future SO₂ emission allowances in a manner that, based on the Company’s resource plan and subject to any identified risk or other considerations, will minimize the expected present value of long-run utility revenue requirements while fulfilling obligations to provide adequate service at reasonable rates through transactions of allowances. Allowance transaction decisions impacting the expected present value of long-run utility revenue requirements shall use as a basis the Company’s resource plan which shall take into consideration: the market price of SO₂ emission allowances needed for compliance with environmental regulations, the cost of investments in emission control equipment, additional operating and maintenance costs associated with new installations of emission control equipment, and other changes in power production costs (e.g. due to declines in the efficiency (heat rates) of generating units and changes in merit order of unit dispatch) associated with new installations of emission control equipment.

Objective 2: Provide structure and procedure for the Staff of the Missouri Public Service Commission (Staff) and the Office of the Public Counsel (OPC) review of SO₂ emission allowance transactions.

Objective 3: Provide structure and procedure for the authorization of SO₂ emission allowance transactions taking place subsequent to the effective date of a final order in Case No. EO-2005-xxx and authorization of the initial SO₂ Plan.

History

Following are excerpts from the Environmental Protection Agency’s (EPA’s) website (<http://www.epa.gov/airmarkets/arp/overview.html#phases>) describing the SO₂ emission allowance trading program:

Title IV of the Clean Air Act [(CAA)] sets a goal of reducing annual SO₂ emissions by 10 million tons below 1980 levels. To achieve these reductions, [a program, deemed the Acid Rain Program, was implemented].

The Acid Rain Program represents a dramatic departure from traditional command and control regulatory methods which establish specific,

inflexible emissions limitations with which all affected sources must comply. Instead, the Acid Rain Program introduces an allowance trading system that harnesses the incentives of the free market to reduce pollution.

Under this system, affected utility units are allocated allowances based on their historic fuel consumption and a specific emissions rate. Each allowance permits a unit to emit 1 ton of SO₂ during or after a specified year. For each ton of SO₂ emitted in a given year, one allowance is retired, that is, it can no longer be used.

Allowances may be bought, sold, or banked. Anyone may acquire allowances and participate in the trading system. However, regardless of the number of allowances a source holds, it may not emit at levels that would violate federal or state limits set under Title I of the Clean Air Act to protect public health.

During Phase II of the program (now in effect), the Act set a permanent ceiling (or cap) of 8.95 million allowances for total annual allowance allocations to utilities. This cap firmly restricts emissions and ensures that environmental benefits will be achieved and maintained.

Procedures

KCPL finds itself in a position where it has an inventory of past, current and future vintage SO₂ emission allowances. The following presents procedures that KCPL will follow to manage its allowance inventory in order to benefit KCPL and its customers and to provide the Staff and OPC with information relevant to the Missouri Public Service Commission's (Commission's) oversight of such activities.

SO₂ Plans

As stated above, KCPL is allocated a certain number of SO₂ emission allowances as provided by law and/or regulation. Each year, allowances are issued for the year 30 years following. KCPL, as part of this agreement, will provide to Staff and OPC annually its SO₂ Plan (SO₂ Plan). As part of the annual SO₂ Plan, KCPL will provide: (1) the number of allowances it currently has banked, (2) the number of allowances it projects to need on a yearly basis (including the separate identification of the expected quantity of allowances (or value thereof) used to offset sulfur premiums paid under coal contracts), (3) the number of additional allowances it projects to receive in future years, (4) KCPL's proposed range of intended transactions for the upcoming plan year, and (5) a summary of the previous plan year's transactions to date. The proposed range of intended transactions may include contingencies for (1) market opportunities, (2) unexpected extended outages or shutdown of a major KCPL generating unit, or (3) other factors identified by KCPL. The annual SO₂ Plan will also consider any scheduled commitments in place prior to the effective date of the final order in Case No. EO-2005-xxx.

The annual SO₂ Plan will consider the types of coals that will be burned in generating units, the sulfur content of those coals, expected regulations that may affect the SO₂ allowance management program, and expected installed air quality pollution control equipment that will affect emission rates of generating units.

In addition to the trading parameters and authority set forth in this SEAMP, KCPL will submit its annual SO₂ Plan to Staff and OPC by December 31 of each calendar year to be effective for the period commencing April 1 of the following year and ending March 31 of the next subsequent year. Concurrently, KCPL will notify the Commission stating that the SO₂ Plan has been provided to designated personnel from Staff and OPC. If no response, disagreement, or concerns in regards to the annual SO₂ Plan are received from Staff and/or OPC within thirty (30) days of the submittal date, the annual SO₂ Plan will apply for future transactions for the SO₂ Plan year. [Note: Written correspondence (email, fax, or letter) will be considered as an official response. Any response must specifically dispute or question an aspect of the Plan and cannot merely be correspondence used to extend the period of review.]

The annual SO₂ Plan may need to be updated throughout the Plan year. Changes in circumstances which may require interim updates would include, but not be limited to, market opportunities and substantial changes in (1) the price of allowances, (2) the cost and/or effectiveness of emission control technologies, (3) environmental regulations or proposed environmental regulations, or (4) other energy market conditions. KCPL will provide any such updated annual SO₂ Plan to Staff and OPC and allow time for them to notify KCPL of any concerns, prior to exceeding the level of planned transactions contained in its most recent effective annual SO₂ Plan. Concurrently, KCPL will notify the Commission stating that the updated SO₂ Plan has been provided to designated personnel from Staff and OPC. If no response, disagreement, or concerns in regards to the updated SO₂ Plan are received from Staff and OPC within thirty (30) days of the submittal, the updated annual SO₂ Plan will automatically be considered to be the current basis for future transactions for the Plan year. [Note: Written correspondence (email, fax, or letter) will be considered as an official response. Any response must specifically dispute or question an aspect of the updated Plan and cannot merely be correspondence used to extend the period of review.]

Any disputes about an SO₂ Plan or any mid-year updates to a Plan will be discussed among the parties and the parties will cooperate to resolve the dispute in good faith. If the parties cannot resolve the dispute within thirty (30) days of the date of the response outlining the objection to the Plan, the matter will be brought to the Commission for its determination.

Contents of SO₂ Plans

The initial SO₂ Plan (based on analysis submitted to Staff and OPC on January 23, 2005) provided an assessment of the short-term to long-term allowance cost risk for compliance with current and future environmental regulations at various KCPL generating facilities. This assessment considered KCPL's option to install air quality control equipment that would lower SO₂ emission rates.

Using the Company's current resource plan as a base, annual SO₂ Plans will include at least three different scenarios of projections. A baseline projection will be made based on projected fuel types (sulfur content), projected emission rates, and best estimate of future regulations. A second projection will be made that looks at a high emissions scenario. The final projection will look at a low emissions scenario. These scenarios will be used to project a range of future allowance bank surpluses or deficits for each year of a planning horizon. The planning horizon will consist of at least ten (10) years.

If not already provided in the Company's resource plan, the annual SO₂ Plan shall also provide an estimate of the cost to "produce" additional allowances at one or more of KCPL's generating facilities if KCPL were to install air quality control equipment that would lower SO₂ emission rates. As part of the documentation of the cost to "produce" additional allowances, KCPL will include a description of its rationale for choosing the specific generating facility upon which the cost estimate is based. The cost estimate may be based on cost data available in the industry and will not require a unit-specific engineering study.

SO₂ Plans will set out KCPL's range of allowances and proposed intended transactions during the upcoming plan year. This range of allowances and the proposed intended transactions will be based on a methodology that will minimize, subject to any identified risk or other considerations, the expected present value of long-run utility revenue requirements, while fulfilling obligations to provide adequate service at reasonable rates and ensuring that the operation of KCPL generators will not be restricted due to a deficiency of available SO₂ emission allowances. Risk considerations will, at a minimum, include: (1) changes in the price of allowances, (2) substantial changes in the cost and/or effectiveness of emission control technologies, (3) substantial changes in environmental regulations or proposed environmental regulations, (4) substantial changes in other energy market conditions, and (5) market opportunities.

By way of example, KCPL's initial SO₂ Plan was influenced by the following:

- Baselines for each unit were established for the initial allocation of SO₂ emission allowances based on historical averages for fossil fuel consumed from 1985 through 1987.
- While KCPL net generation has been greater than the generation levels established in the baseline, significant reductions in SO₂ emissions have resulted because of conversions to Power River Basin coal.
- KCPL has accumulated past vintage allowances in its SO₂ allowance "bank".
- The Clean Air Interstate Rule (CAIR) will impact future SO₂ emission allowance requirements.
- The respective State Implementation Plans set forth by Missouri and Kansas to address implementation of CAIR will impact future SO₂ emission allowance requirements.
- New SO₂ emission regulations are anticipated to have the impact of requiring two allowances for each ton of SO₂ emitted beginning with vintage 2010, and three allowances for each ton emitted beginning with vintage 2015.
- KCPL's strategic initiative for implementing environmental upgrades aligns timing of such upgrades with changes in allowance requirements noted in the preceding bullet point.

- If no sales strategy is implemented as part of the Missouri Regulatory Plan, KCPL will maintain an inventory of SO₂ emission allowances well in excess of requirements given implementation of comprehensive environmental retrofits as scheduled in the Regulatory Plan.

SO₂ Plans will include a summary of the previous year's transactions as of the time of submittal including for each transaction the type of transaction, the quantity of allowances involved in the transaction, the quantity and vintage of any allowances received as a result of the transaction, any monetary value received as a result of the transaction, and any expenses (such as brokerage fees) related to the transaction. SO₂ Plans will also include the quantity of allowances issued to KCPL in the past year by the EPA, the quantity of allowances used to offset emissions in the past year, the quantity of allowances (or value thereof) used to offset sulfur premiums paid under coal contracts, and the quantity of unused allowances allocated to partners.

In addition to the summary report included with the SO₂ Plan submittals, KCPL will create a report that tracks SO₂ allowances by serial number for each transaction. This report will be made available to Staff and OPC upon their request.

Because public knowledge of KCPL's plans could jeopardize its ability to manage its SO₂ emission allowances, KCPL's submitted SO₂ Plans and any updates to those Plans and all transaction documentation will be considered "highly confidential." Certain public information included in the Plans will continue to be available on the Internet on the EPA's website.

Types of Transactions

For the purposes of KCPL's SEAMP the following transactions will be allowed and defined as follows.

SO₂ Emission Allowance Outright Cash Purchases – SO₂ emission allowances purchased to meet expected requirements of KCPL's units.

SO₂ Emission Allowance Outright Cash Sales – SO₂ emission allowances sold from KCPL's share of general or unit account holdings.

SO₂ Emission Allowance Exchanges – The exchange of SO₂ emission allowances either as a "like-kind" exchange or from one vintage to another.

SO₂ Emission Allowance Call Sales – The sale of an option that gives the buyer (holder) the right to buy SO₂ emission allowances for a specified price within a specified time period in exchange for a premium payment. It obligates the seller (writer) of the option to sell SO₂ emission allowances at the designated price should the buyer exercise the option.

SO₂ Emission Allowance Put Purchases – The purchase of an option that gives the buyer (holder) the right but not the obligation to sell SO₂ emission allowances for a specified price within a specified time period in exchange for a premium payment. It obligates the seller (writer) of the option to buy SO₂ emission allowances at the designated price should the buyer exercise the option.

All transactions will be consistent with the Annual SO₂ Plan (or interim updates thereto) provided to Staff and OPC, terms of this SEAMP, and other KCPL internal policies. If the Staff or OPC have any disputes regarding KCPL's Annual SO₂ Plan (or interim updates thereto) (1) that the parties are attempting to resolve or (2) that are pending resolution by the Commission, then KCPL's SO₂ emission allowance transactions must be consistent with the previously effective Annual SO₂ Plan to the extent that following such Plan would not interfere with KCPL's ability to meet its obligations to provide safe and adequate service to its retail customers. Proceeds and costs related to transactions completed under the Annual SO₂ Plans will be accounted for in accordance with the Stipulation and Agreement in Case No. EO-2005-xxx.

[illegible]

Details of the (1) internal controls, (2) internal management reports, and (3) duties and workflow of personnel involved in implementing and overseeing the SEAMP are included in separate documentation; however, this paragraph sets forth the fundamental controls for the SEAMP

program. SO₂ allowance trading may only be authorized by the Company's Designated Representative (DR), Authorized Account Representative (AAR), or Alternate Authorized Account Representative (AAAR) as defined by the CAA. Approval requirements for transactions will be consistent with other similar transaction approval requirements within the Company.

Special Allowance Reserve

Because the availability of **SO₂ emission** allowances is crucial to ensure both the economic efficiency of the emissions limitation program and the addition of new electric-generating capacity, Title IV of the CAA mandates that the EPA hold or sponsor yearly auctions of allowances for a small portion of the total allowances allocated each year. The auctions help ensure that new units have a public source of allowances beyond those allocated initially to existing units. In order to supply this auction, the EPA withholds a portion of the Company's annual allowance allocation. The EPA sells these allowances at auction and provides the proceeds to KCPL. KCPL has no control over such EPA withholding or the amount of proceeds received for these auctioned allowances; however, any such proceeds will be accounted for in the same manner as a transaction completed under the SEAMP.

Anticipated Five-Year Budget Financing Plan Summary

Kansas City Power & Light

Anticipated 5-Year Budget Financing Plan Summary

(\$ in millions)

	Projected					
	2005	2006	2007	2008	2009	TOTAL
ISSUANCES						
<u>KCP&L Debt</u>						
<u>Refinancings</u>						
Existing Senior Notes	160.0	0.0	225.0	0.0	0.0	385.0
<u>New Financings</u>						
Commercial Paper	101.0	0.0	22.3	0.0	67.0	190.4
New Capital Expenditure Funding	0.0	0.0	0.0	250.0	0.0	250.0
<u>KCP&L Equity (Contributed From GPE)</u>						
New Capital Expenditure Funding	0.0	150.0	213.6	100.0	100.0	563.6
TOTAL ISSUANCES	\$261.0	\$150.0	\$460.9	\$350.0	\$167.0	\$1,389.0

AFFORDABILITY, EFFICIENCY AND DEMAND RESPONSE PROGRAMS

1. AFFORDABILITY PROGRAMS

LOW-INCOME AFFORDABLE NEW HOMES PROGRAM

PROGRAM DESCRIPTION

The Low-Income Affordable New Homes Program will be a partnership between KCP&L and non-profit organizations, including Habitat for Humanity and local government community development organizations, to achieve energy-efficient affordable new housing for the low-income community. Incentives will be available for high efficiency CAC, heat pumps and refrigerators. Financial incentives will be set at the full incremental cost for CAC and heat pumps. A \$200 incentive will be available towards the purchase of an ENERGY STAR® rated refrigerator. Finally, up to \$100 will be available towards the purchase of ENERGY STAR® rated lighting fixtures.

The customer incentive budget is based upon 100% homes receiving refrigerator and lighting incentives and 25% of the homes will receiving high efficiency air conditioners, and 25% receiving high efficiency heat pumps.

EVALUATION

Impacts associated with this program will be estimated based upon engineering analysis. If a control group can be identified, a billing analysis may be conducted after homes that have participated in the program has been occupied for at least 1 full year.

LOW INCOME WEATHERIZATION AND HIGH EFFICIENCY PROGRAM

PROGRAM DESCRIPTION

Qualifying lower income customers can get help managing their energy use and bills through KCP&L's low income weatherization and high efficiency program. The program will work directly with local CAP agencies that already provide weatherization services to low income customers through the DOE and other state agencies. KCP&L will provide supplemental funds to the CAPs to cover the cost of weatherization measures. This program will be administered by the CAP agencies and follows the protocol under current federal and state guidelines. Participants can be a KCP&L owner-occupied residential customer in a one to four-unit structure and have an income that is up to 185% of the federal poverty guidelines. Renters will also be allowed to participate if the landlord pays 50% of

the weatherization cost and agrees not to raise the rent for pre-agreed period of time. CAP agencies will be allowed an average of \$1,500 per participant for weatherization and other electric savings measures.

This program helps low income customers reduce their energy costs at no cost to the customer. CAP agencies offer a cost effective implementation capability, which allows most of the funds allocated to this program to go directly to the purchase and installation of energy efficiency measures.

EVALUATION

Weatherization impacts for the first two years of the program will be based upon borrowed analysis from other utility programs. In the third year of the program, a billing analysis will be conducted to estimate impacts for all measures.

1. EFFICIENCY PROGRAMS

ONLINE ENERGY INFORMATION AND ANALYSIS PROGRAM USING NEXUS® RESIDENTIAL SUITE

PROGRAM DESCRIPTION

The online energy information and analysis program allows all residential customers with computers to access their billing information and comparisons of their usage on a daily, weekly, monthly or annual basis. This tool will analyze what end uses make up what percent of their usage, and provide information on ways to save energy by end use through a searchable resource center. This tool also allows the user to analyze why their bill may have changed from one month to another. A home comparison also displays a comparison of the customer's home versus an average similar home via an Energy guide label concept.

EVALUATION

Since this is an informational program and any potential savings will be difficult, if not impossible, to accurately measure, KCP&L does not propose to evaluate the program for energy savings. KCP&L will provide reports on usage.

HOME PERFORMANCE WITH ENERGY STAR® PROGRAM - TRAINING

PROGRAM DESCRIPTION

Home Performance with ENERGY STAR® is a unique program which enhances the traditional existing home energy audit service. This program uses the ENERGY STAR® brand to help encourage and facilitate whole-house energy improvements to existing housing. This program focuses on the private-sector contractors and service professionals who currently work on existing homes – replacing HVAC systems, adding insulation, installing new windows, etc. The Missouri Home Performance with ENERGY STAR® Initiative requires contractors to be accredited under Building Performance Institute (BPI) standards. Technicians must possess appropriate skills and are field-tested to obtain certification, further lending credibility to services offered.

The program strives to provide homeowners with consumer education, value and a whole-house approach. Contractors are trained to provide "one-stop" problem solving that identifies multiple improvements that, as a package, will increase the home's energy efficiency. While the program goal is saving energy, its market-based approach and message focus on addressing a variety of customer needs – comfort, energy savings, durability and health and safety. It also encourages the development of a skilled and available contractor/provider infrastructure that has an economic self-interest in providing and promoting comprehensive, building science-based, retrofit services.

EVALUATION

KCP&L will track whole-house evaluations that are performed by certified contractors in their service territory. In year 3, a billing analysis will be conducted between participants and a control group.

CHANGE A LIGHT– SAVE THE WORLD

PROGRAM DESCRIPTION

Changing the world starts with simple actions. When you replace a light bulb or fixture in your home with one that has earned the U.S. government's ENERGY STAR rating, you contribute to a cleaner environment while saving yourself energy, money and time buying and changing lights in your home. Lighting that has earned the ENERGY STAR® rating prevents greenhouse gas emissions by meeting strict energy efficiency guidelines set by the US Environmental Protection Agency and US Department of Energy. ENERGY STAR® encourages every American to change out the 5 fixtures they use most at home (or the light bulbs in them) to ENERGY STAR® qualified lighting, to save themselves more than \$60 every year in energy costs.

Every fall, ENERGY STAR® partner retailers, manufacturers, utilities, and state organizations come together to make this change even easier. These partners are working to bring more energy-efficient lighting choices to store shelves than ever before. ENERGY STAR® qualified lighting uses two thirds less energy and lasts 6 to 10 times longer than traditional lighting. When you save energy, you not only save money on your utility bills, you also help to protect our environment. KCP&L will contribute funds annually to the state agencies that are working with the EPA and Energy Star to promote this program in the KCP&L service territory. KCP&L expects most of the funds to be used for point of purchase rebates for CFLs.

EVALUATION

KCP&L will rely on evaluations conducted by the EPA and ENERGY STAR®.

COOL HOMES PROGRAM

PROGRAM DESCRIPTION

The Cool Homes Program will encourage residential customers to purchase and install energy-efficient central air conditioning and heat pumps by providing financial incentives to offset a portion of the equipment's higher initial cost. The program's long-range goal is to encourage contractors/distributors to use energy efficiency as a marketing tool, thereby stocking and selling more efficient units and moving the entire CAC and heat pump market toward greater energy efficiency. Incentives will be set at approximately 50% of incremental cost. SEER 13.0 and higher efficiency equipment will be rebated in 2005. Since federal standards are set to be increased from 10 SEER to 13 SEER in 2006, KCP&L will modify the 2006 incentives to only rebate SEER levels at 15.0 and above.

One important feature of the program that will begin immediately is to offer training in Manual J calculations and System Charging and Airflow for HVAC contractors. Manual J is the industry standard residential load calculation method. The training offers step-by-step examples of properly sizing equipment and also addresses principles of heat transfer. The training teaches HVAC contractors to accurately perform and document cooling load calculations and reduces over-sizing. The System Charging and Airflow course addresses airflow and charging procedures and standards and includes hands-on training in the use of testing equipment. Once enough contractors have undergone this training, KCP&L may mandate that these calculations take place in order to qualify for the incentive.

EVALUATION

Evaluation will include random on-site inspections and engineering analysis. Spot metering and runtime data will also be collected to verify the connected load and full load hour estimates used in the engineering analysis.

ENERGY STAR® HOMES – NEW CONSTRUCTION

PROGRAM DESCRIPTION

This program will require that new homes be constructed to a standard at least 30 percent more energy efficient than the 1993 national Model Energy Code. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air, conditioning systems, tight duct systems, and upgraded water-heating equipment.

Homes are qualified as an ENERGY STAR® with use of the Builder Option Packages (BOP). BOPs represent a set of construction specifications for a specific climate zone. BOPs specify performance levels for the thermal envelope, insulation, windows, orientation, HVAC system and water heating efficiency for a specific climate zone that meet the standard. The ENERGY STAR® Homes program will offer technical services and financial incentives to builders while marketing the homes' benefits to buyers. Scaled incentives will be provided to homes that are qualified as ENERGY STAR®.

EVALUATION

Evaluation will include random on-site inspections and engineering analysis. Billing analysis will be conducted in year 3 between participant and control groups.

ONLINE ENERGY INFORMATION AND ANALYSIS PROGRAM USING NEXUS® COMMERCIAL SUITE

PROGRAM DESCRIPTION

The online energy information and analysis program allows all business and non-profit customers with computers to access their billing information and compare their usage on a daily, weekly, monthly or annual basis, analyze what end uses make up what percent of their usage, and access ways to save energy by end use through a searchable resource center. Targeted case studies provide ideas relevant to the customer's industry. This tool also allows the user to analyze why their bill may have changed from one month to another. A business comparison also displays usage benchmarking data versus similar types of businesses.

EVALUATION

Since this is an informational program and any potential savings will be difficult, if not impossible, to accurately measure, KCP&L does not propose to evaluate the program for energy savings. KCP&L will provide reports on usage.

C&I ENERGY AUDIT

PROGRAM DESCRIPTION

KCP&L will offer rebates to customers to cover 50% of the cost of an energy audit. In order to receive the rebate, the customer must implement at least one of the audit recommendations that qualify for a KCP&L C&I custom rebate. The energy audit rebate will be set at 50% of the audit cost up to \$300 for customers with facilities less than 25,000 square feet and up to \$500 for customers with facilities over 25,000 square feet. Energy audits must be performed by certified commercial energy auditors. Customers may choose their own auditor or KCP&L can recommend one. Customers with multiple buildings will be eligible for multiple audit rebates.

EVALUATION

KCP&L will track the effectiveness of this program through the evaluations done for the C&I Custom Rebate Program.

C&I CUSTOM REBATE - RETROFIT

PROGRAM DESCRIPTION

The C&I Custom Rebate Retrofit program will provide rebates to C&I customers that install, replace or retrofit qualifying electric savings measures including HVAC systems, motors, lighting, pumps, etc. All custom rebates will be individually determined and analyzed to ensure that they pass the Societal Benefit/Cost Test. Any measure that is pre-qualified (evaluated prior to being installed) must produce a Societal Benefit/Cost test result of 1.0 or higher.

Custom rebates are calculated as the lesser of the following:

- A buydown to a two year payback
- 50% of the incremental cost

One customer may submit multiple rebate applications for different measures. Each individual measure will be evaluated on its own merits. Similar measures that are proposed in different facilities or buildings will be evaluated separately.

However, no customer, including those with multiple facilities or buildings, may receive more than \$40,000 in incentives for any program year.

As noted in the C&I Energy Audit program description, that program is designed to encourage customers to implement audit recommendations that would qualify for rebates under the C&I Custom Rebate Program.

EVALUATION

By design, the custom rebate program is self-evaluating. Impacts are based upon detailed engineering analysis.

C&I CUSTOM REBATE – NEW CONSTRUCTION

PROGRAM DESCRIPTION

The C&I Custom Rebate New Construction will provide rebates to C&I customers that install qualifying electric savings measures including HVAC systems, motors, lighting, pumps, etc. All custom rebates will be individually determined and analyzed to ensure that they pass the Societal Benefit/Cost Test. Any measure that is pre-qualified (evaluated prior to being installed) must produce a Societal Benefit/Cost test result of 1.0 or higher.

Custom rebates are calculated as the lesser of the following:

- A buydown to a two year payback
- 50% of the incremental cost

One customer may submit multiple rebate applications for different measures. Each individual measure will be evaluated on its own merits. Similar measures that are proposed in different facilities or buildings will be evaluated separately. However, no customer, including those with multiple facilities or buildings, may receive more than \$40,000 in incentives for any program year.

Another component of this program is an online new construction guide that will provide information to commercial builders and developers on energy efficiency in new construction. It first allows the builder or developer to identify the type of new construction building that is being planned, i.e. office building, community center, fire station. It then lists a variety of environmental and energy efficiency options and guides the builder or developer in prioritizing investments for the best results. A sample of this software is available for viewing at <http://seattle.bnim.com/>. KCP&L proposes to build a similar site for the Kansas City metropolitan area but enhance it with features that tie into our rates and will allow developers and builders to plan buildings that can maximize our rates.

EVALUATION

By design, the custom rebate program is self-evaluating. Impacts are based upon detailed engineering analysis.

BUILDING OPERATOR CERTIFICATION PROGRAM

PROGRAM DESCRIPTION

The Building Operator Certification (BOC) Program is a market transformation effort to train facility operators in efficient building operations and management (O&M), establish recognition of and value for certified operators, support the adoption of resource-efficient O&M as the standard in building operations, and create a self-sustaining entity for administering and marketing the training. This program requires a lot of effort and manpower. KCP&L cannot accomplish the program objectives alone. In year one of this program, KCP&L will work with the Missouri Department of Natural Resources to build a partnership with other Missouri stakeholders (sponsors). Once this has been accomplished, the program will begin to offer customers the Building Operator Training and Certification (BOC) program. The program will use a portion of its sponsor's funds (including the funds provided by KCP&L) to license the BOC curriculum from the Northwest Energy Efficiency Council (NEEC), its developer. Building operators that attend the training course will be expected to pay the cost of the course, less a \$100 rebate that will be issued upon successful completion of all course requirements. The program is expected to attract customers with large facilities (over 250,000 sq. ft.) that employ full time building operators.

EVALUATION

KCP&L will track the effectiveness of this program through the evaluations done by the Missouri Department of Natural Resources.

MARKET RESEARCH

PROGRAM DESCRIPTION

The market research component of this program will concentrate on specific opportunities to expand program offerings. Of particular interest will be expanding rebates to other ENERGY STAR® rated appliances such as washing machines; investigating the potential for a 2nd refrigerator pickup program and offering incentives to small commercial customers for ENERGY STAR® rated office equipment.

3. DEMAND RESPONSE PROGRAMS

AIR CONDITIONING CYCLING

PROGRAM DESCRIPTION

The Air Conditioning Cycling (ACC) is a program by which KCP&L can reduce residential and small commercial air conditioning load during peak summer days. The company achieves this load reduction by sending a paging signal to a control device attached to the customer's air conditioner. The control device then turns the air conditioner off and on over a period of time depending on the control and load reduction strategy established by the company.

EVALUATION

This evaluation will contribute significantly to the decision to extend the program.

- Collect customer hourly usage data for the first three summers.
- Evaluate capacity and energy impacts at the end of the third summer season.

THE ALLIANCE, AN ENERGY PARTNERSHIP PROGRAM

PROGRAM DESCRIPTION

The Alliance, an energy partnership program, is a curtailment and distributed generation program designed to be a partnership with commercial and industrial customers. It is comprised of three coordinated programs. These are MPower, Distributed Generation and Commercial Lighting Curtailment. The program provides incentives to customers to reduce their load or add customer generation to the grid to offset the higher costs KCPL would incur without the reduced load or added customer generation.

MPower is a contracted load curtailment program for large commercial and industrial customers that provide a capacity and energy payment to participating customers to curtail their usage during summer months when high electric demand occurs. Customers are eligible for participation in the program by providing a minimum load reduction of 200 kW during KCP&L's high usage/high cost periods. The Missouri Public Service Commission and the Kansas Commerce Commission have approved the program tariff, currently known as Peak Load Curtailment Credit (PLCC). A new tariff will be filed as this two-part incentive program becomes finalized. The customer contract could extend over several years.

Distributed Generation is a program in which KCP&L contracts with a customer that has on-site generation to use their generator when needed. This program captures additional value from the customer's generator and provides support to the utility grid. The customer contract is expected to be over several years.

Commercial Lighting Curtailment is a program in which KCP&L contracts with commercial customers to reduce their lighting load when requested. This is accomplished by permanently installing control devices that either reduce the voltage to the lights or turn off perimeter lighting in office buildings. In either case new equipment will be installed to achieve this load reduction. The load curtailment contract will extend over several years.

EVALUATION

This evaluation will contribute significantly to the decision to extend the program.

- Customer research
 - Focus groups – Sept '05 and Sept '06
 - Telephone surveys – Oct '05 and Oct '06
- Process evaluation – Dec '05 and Dec '06
- Impact evaluation – Nov '05 and Nov '06

Rev 2/3/05 to separate

AA from EE

Program	Type	Seg- ment	NC/Ret	Allocation Comments	Allocation		Year 1 Estimates								
					MO	KS	\$ Total	\$ MO	\$ KS	kW Total	kW MO	kW KS	kWh Total	kWh MO	kWh KS
ANNUAL TOTAL							\$6,441,583	\$3,520,340	\$2,921,240	53,743	30,363	23,379	9,476,868	5,360,226	4,116,637
CUMMULATIVE TOTAL							\$6,441,583	\$3,520,340	\$2,921,240	53,743	30,363	23,379	9,476,868	5,360,226	4,116,637
Annual DR Totals							\$3,366,733	\$1,718,466	\$1,648,267	49,977	28,320	21,656	1,964,327	1,137,555	826,772
Cummulative DR Totals							\$3,366,733	\$1,718,466	\$1,648,267	49,977	28,320	21,656	1,964,327	1,137,555	826,772
Annual EE Totals							\$2,591,750	\$1,414,561	\$1,177,189	3,665	1,958	1,707	7,096,000	3,873,193	3,222,807
Cummulative EE Totals							\$2,591,750	\$1,414,561	\$1,177,189	3,665	1,958	1,707	7,096,000	3,873,193	3,222,807
Annual AFF Total							\$483,100	\$387,312	\$95,784	101	85	16	416,541	349,478	67,058
Cummulative AFF Totals							\$483,100	\$387,312	\$95,784	101	85	16	416,541	349,478	67,058
Affordability															
Affordable New Homes	Dir Imp	R-Aff	NC	Currently allocated by % of low income in each state. Incentives to be by actual.	83.9%	16.1%	\$16,000	\$13,424	\$2,573	15	13	2	25,360	21,277	4,078
Low Income Weatherization (non-KCMO)	Dir Imp	R-Aff	Ret	By est. low income population without KCMO	20.4%	79.6%	\$117,100	\$23,888	\$93,212	86	72	14	391,181	328,201	62,980
Low Income WX-KCMO					100%	0%	\$350,000	\$350,000	\$0						
Allocation for total				By est. low income population	83.9%	16.1%									
Energy Efficiency															
Online EE information/analysis (Nexus)	Educ	R	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	51.5%	48.5%	\$281,750	\$144,989	\$136,761	0	0	0	0	0	0
Home Performance-Training	Dir Imp	R	Ret	Can be limited by state but with great difficulty. Crews work both states.	51.5%	48.5%	\$177,500	\$91,342	\$86,159	0	0	0	0	0	0
Change a Light-Save the World	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$152,500	\$78,477	\$74,024	1,125	579	546	2,475,000	1,273,635	1,201,365
Cool Homes Program	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$955,000	\$491,443	\$463,557	1,668	858	810	1,948,000	1,002,441	945,559
Energy Star Homes	Dir Imp	R	NC	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$80,000	\$41,168	\$38,832	0	0	0	0	0	0
PAYS-type Concept	Dir Imp	R	Ret	MO only	100%	0%	\$25,000	\$25,000	\$0	0	0	0	0	0	0
Online EE information/analysis (Nexus)	Educ	C	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	59.8%	40.3%	\$0	\$0	\$0	0	0	0	0	0	0
C&I Energy Audits	Educ	Comm	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$0	\$0	\$0	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$30,000	\$17,925	\$12,075	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	NC	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$707,500	\$422,731	\$284,769	872	521	351	2,673,000	1,597,118	1,075,883
Building Operator Certification	Dir Imp	M&L C&I	Ret	Can be by state.	59.8%	40.3%	\$105,000	\$62,738	\$42,263	0	0	0	0	0	0
Market Research	0	All	0	By % only; cannot be separated	50.0%	50.0%	\$77,500	\$38,750	\$38,750	0	0	0	0	0	0
Demand Response															
Residential A/C Cycling					42.3%	57.7%	\$1,503,834	\$636,122	\$867,712	4,532	1,917	2,615	23,537	9,956	13,581
Commercial Curtailment					58.1%	41.9%	\$1,862,899	\$1,082,344	\$780,555	45,445	26,404	19,041	1,940,790	1,127,599	813,191

Budget includes capital & O&M

Rev 2/3/05 to separate

AA from EE

Program	Type	Segment	NC/Ret	Allocation Comments	Allocation		Year 2 Estimates								
					MO	KS	\$ Total	\$ MO	\$ KS	kW Total	kW MO	kW KS	kWh Total	kWh MO	kWh KS
ANNUAL TOTAL							\$8,935,244	\$4,952,111	\$3,983,127	25,985	14,076	11,909	15,072,964	8,553,823	6,519,131
CUMMULATIVE TOTAL							\$15,376,827	\$8,472,451	\$6,904,367	79,728	44,439	35,289	24,549,832	13,914,049	10,635,768
Annual DR Totals							\$3,948,794	\$2,006,589	\$1,942,205	19,281	10,378	8,903	523,584	297,215	226,370
Cummulative DR Totals							\$7,315,527	\$3,725,055	\$3,590,472	69,258	38,699	30,559	2,487,911	1,434,770	1,053,141
Annual EE Totals							\$4,437,350	\$2,494,785	\$1,942,565	6,579	3,593	2,986	14,062,500	7,848,116	6,214,384
Cummulative EE Totals							\$7,029,100	\$3,909,347	\$3,119,753	10,244	5,551	4,693	21,158,500	11,721,309	9,437,191
Annual AFF Total							\$549,100	\$450,736	\$98,357	125	105	20	486,880	408,492	78,378
Cummulative AFF Totals							\$1,032,200	\$838,049	\$194,142	226	190	36	903,421	757,970	145,436
Affordability															
Affordable New Homes	Dir Imp	R-Aff	NC	Currently allocated by % of low income in each state. Incentives to be by actual.	83.9%	16.1%	\$32,000	\$26,848	\$5,146	29	24	5	50,720	42,554	8,156
Low Income Weatherization (non-KCMO)	Dir Imp	R-Aff	Ret	By est. low income population without KCMO	20.4%	79.6%	\$117,100	\$23,888	\$93,212	96	81	15	436,160	365,938	70,222
Low Income WX-KCMO					100%	0%	\$400,000	\$400,000	\$0						
Allocation for total				By est. low income population	83.9%	16.1%									
Energy Efficiency															
Online EE information/analysis (Nexus)	Educ	R	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	51.5%	48.5%	\$223,950	\$115,245	\$108,705	0	0	0	0	0	0
Home Performance-Training	Dir Imp	R	Ret	Can be limited by state but with great difficulty. Crews work both states.	51.5%	48.5%	\$127,500	\$65,612	\$61,889	0	0	0	0	0	0
Change a Light-Save the World	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$152,500	\$78,477	\$74,024	1,125	579	546	2,475,000	1,273,635	1,201,365
Cool Homes Program	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$1,355,000	\$697,283	\$657,717	2,490	1,281	1,209	2,907,000	1,495,942	1,411,058
Energy Star Homes	Dir Imp	R	NC	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$545,000	\$280,457	\$264,543	466	240	226	1,303,500	670,781	632,719
PAYS-type Concept	Dir Imp	R	Ret	MO only	100%	0%	\$125,000	\$125,000	\$0	0	0	0	0	0	0
Online EE information/analysis (Nexus)	Educ	C	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	59.8%	40.3%	\$240,900	\$143,938	\$96,962	0	0	0	0	0	0
C&I Energy Audits	Educ	Comm	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$60,000	\$35,850	\$24,150	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$502,500	\$300,244	\$202,256	697	416	281	2,138,000	1,277,455	860,545
Custom Rebates	Dir Imp	M&L C&I	NC	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$922,500	\$551,194	\$371,306	1,301	777	524	3,989,000	2,383,428	1,605,573
Building Operator Certification	Dir Imp	M&L C&I	Ret	Can be by state.	59.8%	40.3%	\$105,000	\$62,738	\$42,263	500	299	201	1,250,000	746,875	503,125
Market Research	0	All	0	By % only; cannot be separated	50.0%	50.0%	\$77,500	\$38,750	\$38,750	0	0	0	0	0	0
Demand Response															
Residential A/C Cycling					42.3%	57.7%	\$1,820,634	\$770,128	\$1,050,506	5,215	2,206	3,009	44,226	18,708	25,519
Commercial Curtailment					58.1%	41.9%	\$2,128,160	\$1,236,461	\$891,699	14,066	8,172	5,894	479,358	278,507	200,851

Budget includes capital & O&M

Rev 2/3/05 to separate

AA from EE

Program	Type	Segment	NC/Ret	Allocation Comments	Allocation		Year 3 Estimates								
					MO	KS	\$ Total	\$ MO	\$ KS	kW Total	kW MO	kW KS	kWh Total	kWh MO	kWh KS
ANNUAL TOTAL							\$10,132,247	\$5,675,353	\$4,456,886	22,500	12,138	10,362	17,544,272	9,930,465	7,613,797
CUMMULATIVE TOTAL							\$25,509,074	\$14,147,804	\$11,361,253	102,228	56,578	45,650	42,094,104	23,844,514	18,249,565
Annual DR Totals							\$4,285,047	\$2,197,458	\$2,087,589	14,975	7,987	6,988	592,050	335,027	257,023
Cummulative DR Totals							\$11,600,574	\$5,922,513	\$5,678,060	84,233	46,686	37,547	3,079,961	1,769,797	1,310,164
Annual EE Totals							\$5,205,600	\$2,963,726	\$2,241,874	7,390	4,038	3,352	16,419,000	9,148,064	7,270,936
Cummulative EE Totals							\$12,234,700	\$6,873,073	\$5,361,627	17,634	9,589	8,045	37,577,500	20,869,374	16,708,127
Annual AFF Total							\$641,600	\$514,169	\$127,423	135	113	22	533,222	447,373	85,839
Cummulative AFF Totals							\$1,673,800	\$1,352,218	\$321,565	361	303	58	1,436,643	1,205,343	231,274
Affordability															
Affordable New Homes	Dir Imp	R-Aff	NC	Currently allocated by % of low income in each state. Incentives to be by actual.	83.9%	16.1%	\$39,500	\$33,141	\$6,352	29	24	5	50,720	42,554	8,156
Low Income Weatherization (non-KCMO)	Dir Imp	R-Aff	Ret	By est. low income population without KCMO	20.4%	79.6%	\$152,100	\$31,028	\$121,072	106	89	17	482,502	404,819	77,683
Low Income WX-KCMO					100%	0%	\$450,000	\$450,000	\$0						
Allocation for total				By est. low income population	83.9%	16.1%									
Energy Efficiency															
Online EE information/analysis (Nexus)	Educ	R	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	51.5%	48.5%	\$201,300	\$103,589	\$97,711	0	0	0	0	0	0
Home Performance-Training	Dir Imp	R	Ret	Can be limited by state but with great difficulty. Crews work both states.	51.5%	48.5%	\$147,500	\$75,904	\$71,597	0	0	0	0	0	0
Change a Light-Save the World	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$152,500	\$78,477	\$74,024	1,125	579	546	2,475,000	1,273,635	1,201,365
Cool Homes Program	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$1,405,000	\$723,013	\$681,987	2,490	1,281	1,209	2,907,000	1,495,942	1,411,058
Energy Star Homes	Dir Imp	R	NC	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$985,000	\$506,881	\$478,119	933	480	453	2,607,000	1,341,562	1,265,438
PAYS-type Concept	Dir Imp	R	Ret	MO only	100%	0%	\$250,000	\$250,000	\$0	0	0	0	0	0	0
Online EE information/analysis (Nexus)	Educ	C	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	59.8%	40.3%	\$171,800	\$102,651	\$69,150	0	0	0	0	0	0
C&I Energy Audits	Educ	Comm	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$60,000	\$35,850	\$24,150	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$727,500	\$434,681	\$292,819	1,041	622	419	3,191,000	1,906,623	1,284,378
Custom Rebates	Dir Imp	M&L C&I	NC	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$922,500	\$551,194	\$371,306	1,301	777	524	3,989,000	2,383,428	1,605,573
Building Operator Certification	Dir Imp	M&L C&I	Ret	Can be by state.	59.8%	40.3%	\$105,000	\$62,738	\$42,263	500	299	201	1,250,000	746,875	503,125
Market Research	0	All	0	By % only; cannot be separated	50.0%	50.0%	\$77,500	\$38,750	\$38,750	0	0	0	0	0	0
Demand Response															
Residential A/C Cycling					42.3%	57.7%	\$1,849,076	\$782,159	\$1,066,917	4,518	1,911	2,607	56,669	23,971	32,698
Commercial Curtailment					58.1%	41.9%	\$2,435,971	\$1,415,299	\$1,020,672	10,457	6,076	4,382	535,381	311,056	224,325

Budget includes capital & O&M

Rev 2/3/05 to separate

AA from EE

Program	Type	Seg- ment	NC/Ret	Allocation Comments	Allocation		Year 4 Estimates								
					MO	KS	\$ Total	\$ MO	\$ KS	kW Total	kW MO	kW KS	kWh Total	kWh MO	kWh KS
ANNUAL TOTAL							\$11,863,239	\$6,545,076	\$5,318,157	39,634	21,658	17,976	18,289,046	10,369,124	7,919,912
CUMMULATIVE TOTAL							\$37,372,313	\$20,692,880	\$16,679,410	141,862	78,236	63,626	60,383,150	34,213,638	26,169,476
Annual DR Totals							\$6,113,589	\$3,083,769	\$3,029,821	32,099	17,498	14,601	1,291,845	735,949	555,896
Cummulative DR Totals							\$17,714,163	\$9,006,282	\$8,707,881	116,332	64,183	52,149	4,371,806	2,505,746	1,866,060
Annual EE Totals							\$5,100,550	\$2,910,571	\$2,189,979	7,390	4,038	3,352	16,419,000	9,148,064	7,270,936
Cummulative EE Totals							\$17,335,250	\$9,783,644	\$7,551,606	25,024	13,628	11,396	53,996,500	30,017,438	23,979,062
Annual AFF Total							\$649,100	\$550,736	\$98,357	145	122	23	578,201	485,111	93,080
Cummulative AFF Totals							\$2,322,900	\$1,902,954	\$419,922	506	425	81	2,014,844	1,690,454	324,354
Affordability															
Affordable New Homes	Dir Imp	R-Aff	NC	Currently allocated by % of low income in each state. Incentives to be by actual.	83.9%	16.1%	\$32,000	\$26,848	\$5,146	29	24	5	50,720	42,554	8,156
Low Income Weatherization (non-KCMO)	Dir Imp	R-Aff	Ret	By est. low income population without KCMO	20.4%	79.6%	\$117,100	\$23,888	\$93,212	116	97	19	527,481	442,557	84,924
Low Income WX-KCMO					100%	0%	\$500,000	\$500,000	\$0						
Allocation for total				By est. low income population	83.9%	16.1%									
Energy Efficiency															
Online EE information/analysis (Nexus)	Educ	R	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	51.5%	48.5%	\$205,350	\$105,673	\$99,677	0	0	0	0	0	0
Home Performance-Training	Dir Imp	R	Ret	Can be limited by state but with great difficulty. Crews work both states.	51.5%	48.5%	\$127,500	\$65,612	\$61,889	0	0	0	0	0	0
Change a Light-Save the World	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$152,500	\$78,477	\$74,024	1,125	579	546	2,475,000	1,273,635	1,201,365
Cool Homes Program	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$1,355,000	\$697,283	\$657,717	2,490	1,281	1,209	2,907,000	1,495,942	1,411,058
Energy Star Homes	Dir Imp	R	NC	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$935,000	\$481,151	\$453,849	933	480	453	2,607,000	1,341,562	1,265,438
PAYS-type Concept	Dir Imp	R	Ret	MO only	100%	0%	\$250,000	\$250,000	\$0	0	0	0	0	0	0
Online EE information/analysis (Nexus)	Educ	C	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	59.8%	40.3%	\$172,700	\$103,188	\$69,512	0	0	0	0	0	0
C&I Energy Audits	Educ	Comm	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$60,000	\$35,850	\$24,150	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$737,500	\$440,656	\$296,844	1,041	622	419	3,191,000	1,906,623	1,284,378
Custom Rebates	Dir Imp	M&L C&I	NC	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$922,500	\$551,194	\$371,306	1,301	777	524	3,989,000	2,383,428	1,605,573
Building Operator Certification	Dir Imp	M&L C&I	Ret	Can be by state.	59.8%	40.3%	\$105,000	\$62,738	\$42,263	500	299	201	1,250,000	746,875	503,125
Market Research	0	All	0	By % only; cannot be separated	50.0%	50.0%	\$77,500	\$38,750	\$38,750	0	0	0	0	0	0
Demand Response															
Residential A/C Cycling					42.3%	57.7%	\$2,963,461	\$1,253,544	\$1,709,917	7,290	3,084	4,206	92,486	39,122	53,364
Commercial Curtailment					58.1%	41.9%	\$3,150,128	\$1,830,225	\$1,319,904	24,809	14,414	10,395	1,199,359	696,827	502,531

Budget includes capital & O&M

Rev 2/3/05 to separate

AA from EE

Program	Type	Seg- ment	NC/Ret	Allocation Comments	Allocation		Year 5								
					MO	KS	\$ Total	\$ MO	\$ KS	kW Total	kW MO	kW KS	kWh Total	kWh MO	kWh KS
ANNUAL TOTAL							\$15,409,699	\$8,301,495	\$7,108,199	61,531	33,600	27,931	19,466,069	11,059,733	8,406,326
CUMMULATIVE TOTAL							\$52,782,013	\$28,994,374	\$23,787,608	203,393	111,836	91,557	79,849,220	45,273,372	34,575,802
Annual DR Totals							\$9,605,249	\$4,787,667	\$4,817,582	53,986	29,431	24,554	2,423,889	1,388,821	1,035,068
Cummulative DR Totals							\$27,319,413	\$13,793,949	\$13,525,463	170,318	93,615	76,703	6,795,696	3,894,567	2,901,128
Annual EE Totals							\$5,105,350	\$2,913,091	\$2,192,259	7,390	4,038	3,352	16,419,000	9,148,064	7,270,936
Cummulative EE Totals							\$22,440,600	\$12,696,734	\$9,743,866	32,414	17,666	14,748	70,415,500	39,165,502	31,249,998
Annual AFF Total							\$699,100	\$600,736	\$98,357	155	130	25	623,180	522,848	100,322
Cummulative AFF Totals							\$3,022,000	\$2,503,691	\$518,279	661	555	106	2,638,024	2,213,302	424,676
Affordability															
Affordable New Homes	Dir Imp	R-Aff	NC	Currently allocated by % of low income in each state. Incentives to be by actual.	83.9%	16.1%	\$32,000	\$26,848	\$5,146	29	24	5	50,720	42,554	8,156
Low Income Weatherization (non-KCMO)	Dir Imp	R-Aff	Ret	By est. low income population without KCMO	20.4%	79.6%	\$117,100	\$23,888	\$93,212	126	106	20	572,460	480,294	92,166
Low Income WX-KCMO					100%	0%	\$550,000	\$550,000	\$0						
Allocation for total				By est. low income population	83.9%	16.1%									
Energy Efficiency															
Online EE information/analysis (Nexus)	Educ	R	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	51.5%	48.5%	\$209,550	\$107,834	\$101,716	0	0	0	0	0	0
Home Performance-Training	Dir Imp	R	Ret	Can be limited by state but with great difficulty. Crews work both states.	51.5%	48.5%	\$127,500	\$65,612	\$61,889	0	0	0	0	0	0
Change a Light-Save the World	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$152,500	\$78,477	\$74,024	1,125	579	546	2,475,000	1,273,635	1,201,365
Cool Homes Program	Dir Imp	R	Ret	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$1,355,000	\$697,283	\$657,717	2,490	1,281	1,209	2,907,000	1,495,942	1,411,058
Energy Star Homes	Dir Imp	R	NC	Promotion by %. Incentives to be by actual. Can be by state.	51.5%	48.5%	\$935,000	\$481,151	\$453,849	933	480	453	2,607,000	1,341,562	1,265,438
PAYS-type Concept	Dir Imp	R	Ret	MO only	100%	0%	\$250,000	\$250,000	\$0	0	0	0	0	0	0
Online EE information/analysis (Nexus)	Educ	C	Ret	Set up/software/monthly maintenance by %. User fee to be by actual. Can be made available by state only.	59.8%	40.3%	\$173,300	\$103,547	\$69,753	0	0	0	0	0	0
C&I Energy Audits	Educ	Comm	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$60,000	\$35,850	\$24,150	0	0	0	0	0	0
Custom Rebates	Dir Imp	M&L C&I	Ret	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$737,500	\$440,656	\$296,844	1,041	622	419	3,191,000	1,906,623	1,284,378
Custom Rebates	Dir Imp	M&L C&I	NC	Promotion by %. Incentives to be by actual. Can be by state.	59.8%	40.3%	\$922,500	\$551,194	\$371,306	1,301	777	524	3,989,000	2,383,428	1,605,573
Building Operator Certification	Dir Imp	M&L C&I	Ret	Can be by state.	59.8%	40.3%	\$105,000	\$62,738	\$42,263	500	299	201	1,250,000	746,875	503,125
Market Research	0	All	0	By % only; cannot be separated	50.0%	50.0%	\$77,500	\$38,750	\$38,750	0	0	0	0	0	0
Demand Response															
Residential A/C Cycling					42.3%	57.7%	\$5,018,876	\$2,122,985	\$2,895,892	12,242	5,179	7,064	123,156	52,095	71,061
Commercial Curtailment					58.1%	41.9%	\$4,586,373	\$2,664,683	\$1,921,690	41,743	24,253	17,491	2,300,733	1,336,726	964,007

Budget includes capital & O&M

Kansas City Power & Light Strategic Initiative Projects

Projected In-Service Dates

		In-Service
AA22	Iatan 2 500MW Unit	6/01/2010
AA23	Wind Generation 100MW 2006	12/1/2006
AT01	Iatan Railroad Bridge	12/31/2009
AF42	L1 FGD Scrubber Repl	12/31/2009
AF43	L1 Baghouse	5/31/2009
AF64	LAC #1 SCR	4/30/2007
AG61	Iatan 1 SCR	11/30/2008
AG62	Iat 1 FGD Scrubber	11/30/2008
AG69	Iatan 1 Baghouse	11/30/2008
BC19	345KV Iatan-Nashua Line	12/31/2009
BD05	Upgrade Xfrmr at W. Gardner	7/1/2008
BD23	Nashua Sub-345KV Ring Bus	12/1/2009
BD44	Iatan Sub Expansion	12/31/2008
BE27	Wind Generation Sub 1	6/30/2006
BP01	Trans Asset Mgmt System	Multiple
KA50	Asset Mgmt Strategic Init	Multiple
KA51	Distributed Utility	Multiple
KA52	Accelerated Dist Automation	Multiple

REGULATORY INITIATIVES CAPITAL/AMORTIZATIONS PROJECTS (\$000's)						
PROJECT	2005	2006	2007	2008	2009*	TOTAL
IATAN 2	13,027	30,912	138,421	246,136	347,761	776,257
WIND GENERATION	19,215	111,623	0	0	0	130,838
ENVIRONMENTAL	8,387	44,949	107,900	101,225	9,352	271,813
ASSET MANAGEMENT	4,000	5,696	8,501	11,309	12,820	42,326
DSM PROGRAMS	6,442	8,935	10,132	11,863	15,410	52,782
TOTAL	51,071	202,115	264,954	370,533	385,343	1,274,016

* Iatan 2 numbers includes \$148,680(000) of expenditures in 2010

Asset Management Plan

The following is KCPL's description of the Asset Management activities at Kansas City Power & Light Co. (KCP&L). Asset Management at KCP&L is the structured and disciplined process to develop the program of work for system expansion, system improvements, and maintenance; both corrective and preventive. Figure 1 illustrates the process to develop and execute the scope of work. Our objective is to provide a scope of work to achieve the following three key corporate strategic goals for the least overall cost:

- Mitigate risks of major outage events to our customers – an example may be the refurbishment or replacement of substation circuit breakers.
- Minimize SAIDI as it is related to duration and number of outages to our customers – examples of this may be employing distribution automation and/or focused asset replacement programs.
- Minimize number of customers with multiple interruptions – examples of this may be employing distribution automation, poor performing circuit programs, and equipping substation breakers with auto fuse saving control.

KCP&L is currently working to enhance and develop tools and processes, improve our internal communications for feedback, and heighten our industry participation in automation, reliability and asset management related activities. We are using these methods to make use of technology to get the most out of our existing system and to modify existing programs and initiatives to focus on the greatest contributing factors to outages and system failures. KCP&L has already been making strides in utilizing the 2004 implementation of our Outage Management System to develop customer focused reliability programs.

KCP&L has developed a budget to manage identified risks, maintain our system capacity levels to meet forecasted growth and repair facilities as they reach their end of life. We have also included in this budget the implementation of technologies like Distribution Automation to help control costs and improve performance. This budget has inherent risk in that the system is aging and we have known pockets of poor performing facilities. We expect from experiences of other utilities that failure rates of certain components will increase over time. The current budget does not address this issue therefore the following impacts on operations will eventually be realized:

- Aging infrastructure results in more frequent component failures
- Higher O&M costs
- Higher unplanned Capital costs
- Reduced customer reliability (i.e., higher SAIDI, SAIFI, MAIFI and number of customers with multiple interruptions)

We have developed plans to address this issue that require additional funds. This plan allocates resources to address known issues on the system that either present the highest risk of a major system outage or impact customers through multiple outages over relatively short spans of time. To do this we intend to implement projects to address the identified system risks and allocate renewal programs where asset and performance data indicate the need. We will also apply technologies such as distribution automation to improve system performance. Another benefit of automation is to isolate failing system components, thereby mitigating the customer impact and focusing the replacement needs.

This plan includes the following elements:

- Conduct a system wide condition assessment and inventory of the overhead distribution system
- Implement projects to address components which are nearing their end of life
- Utilize customer outage data to develop programs that minimize the number of outages customers experience
- Utilize industry experience with our inventory and performance data to conduct studies to develop targeted renewal programs
- Refine our maintenance practices to optimize costs and extend the life of existing facilities
- Implement distribution automation programs.

By implementing this plan, we can expect to:

- Manage asset replacement schedules and our aging infrastructure
- Define future capital requirements
- Optimize system maintenance
- Improve system design for better long term performance
- Maintain Tier 1 reliability performance
- Identify the best opportunities for strategic capital and O&M investments

The capital requirements for our plan are shown below. This plan request assumes a certain level of maintenance expenditures including a project to conduct a system wide condition assessment and inventory of the overhead distribution system. This project is predominately a maintenance expenditure that provides substantial return by improving our ability to target capital renewal programs towards facilities that are nearing end of life. Our plan is to implement this project in 2005 and complete it in 2008. We intend to manage our capital spend through this period of higher overall cash requirements using our improved Outage Management System, enhanced processes and more complete asset data.

Proposed Capital Expenditure Level Increases (excluding demand response programs)

(in millions)	2005	2006	2007	2008	2009	Total
Plan Request *	\$4.0	\$5.7	\$8.5	\$11.3	\$12.8	\$42.3

* These multi-year expenditures are increases above the normal capital expenditures for the years stated.

This plan provides adequate capital to address known system issues and maintain Tier 1 reliability performance. We feel that we can manage the system through this period with these funds.

Credit Ratio Ranges & Definitions

	AA		A		BBB			BB	
	Min.	Max.	Min.	Max.	Min.	Top $\frac{1}{3}$	Max.	Min.	Max.
Total Debt to Total Capitalization ⁽¹⁾	32%	40%	40%	48%	48%	51%	58%	58%	62%
Funds From Operations Interest Coverage ⁽²⁾	5.2x	6.0x	4.2x	5.2x	3.0x	3.8x	4.2x	2.0x	3.0x
Funds From Operations as a % of Average Total Debt ⁽³⁾	35%	45%	28%	35%	18%	25%	28%	12%	18%

Ratio Definitions:

- (1) “Total Debt to Total Capitalization” is calculated as Total Debt ÷ Total Capitalization where Total Debt and Total Capitalization are defined as below:
- Total Debt is calculated as:
 - Notes Payable + Current Maturities of Long-Term Debt + Current Capitalized Lease Obligations + Long-Term Debt + Capitalized Lease Obligations + Total Off-Balance Sheet Debt
 - “Total Off-Balance Sheet Debt” includes off-balance sheet financings such as:
 - Operating and synthetic leases, accounts receivable securitizations, contingent liabilities and other potential off-balance sheet obligations
 - Total Capitalization includes:
 - Total Debt + Minority Interest + Total Preferred and Preference Stock + Common Stock Equity
- (2) “Funds From Operations Interest Coverage” is calculated as (Funds From Operations + Gross Interest Expense) ÷ Gross Interest Expense where Funds From Operations and Gross Interest Expense are defined as below:
- Funds From Operations is calculated as:
 - Cash From Operations – Working Capital
 - Gross Interest Expense is calculated as:
 - Interest Expense (net) + Allowance For Borrowed Funds Used During Construction + Interest on Off-Balance Sheet Debt
- (3) “Funds From Operations as a % of Average Total Debt” is calculated as Funds From Operations ÷ Average Total Debt where Funds From Operations and Average Total Debt are defined as below:
- Funds From Operations
 - As defined above
 - Average Total Debt is calculated as:
 - The average total debt over the period subject to analysis

Adjustment of Amortization Amounts Illustration

Illustration of the Method Used to Determine the Adjustment to Amortization Amounts Required for KCPL to Meet Investment Grade Credit Guidelines.

Method:

For the purpose of this example, the base financial information, provided by KCPL in its 2003 surveillance report and other KCPL financial statements, was used. KCPL made adjustments to this base financial information to include certain off balance sheet items. These adjustments were to conform with rating agency methods for balance sheet statement. KCPL identified these accounting adjustments, such as the equivalent debt treatment of operating leases and capacity contracts. The equivalent debt treatment of these off balance sheet items was determined by calculating the net present value of the future stream of lease or contract payments. The base 2003 financial information was then adjusted by the equivalent debt balances and the interest expense associated with the equivalent debt balances. From this adjusted information, KCPL then calculated the three guideline ratios defined in Appendix E allocated to the Missouri jurisdiction. If any of the operational guideline metrics fell below the required criteria, then KCPL would determine the amount of additional funds from operations that would be required for KCPL to meet the operational guideline.

Current guidelines for top third of BBB category for a business profile 6 (equivalent business profile to KCPL) company:

- a. 51% Total debt to total capital
- b. 3.8x Funds from operations interest coverage (an operational guideline)
- c. 25% Funds from operations as a percentage of average total debt(an operational guideline)

Explanation of Attachment 1 to Appendix F: Additional Amortization Required

This illustration is based on KCPL financial information consisting of information from its 2003 surveillance report and other KCPL financial statements. This illustration assumes that the Commission has found all expenditures to be prudent and reasonable. For this illustration, KCPL statements were placed on a jurisdictional basis by applying an allocation factor to the KCPL balances. This illustration assumes that the Commission has accepted the jurisdictional amounts used in these calculations. The base jurisdictional information was used to calculate the three (3) rating agency guidelines. In this illustration, the Missouri jurisdictional funds from operations (FFO) as a percent of average debt was found to be 23.3%, which is below the guideline criteria of 25%. In order for the guideline to be achieved, \$12,006,000 of additional FFO would be needed from Missouri. The additional FFO was then studied to determine if there would be any additional tax impacts on cash flow resulting from the additional FFO. This illustration assumes that the entire additional FFO would have negative tax cash flow impacts, thereby resulting in an additional amortization of \$19,569,000 needed in order to meet

the guideline level. The Signatory Parties have not agreed to a methodology to determine the tax impacts related to additional FFO. In this illustration, the revenue requirement amount equals the amortization amount. The overall impact on Missouri customers would be a 4.2% increase in revenue requirement.

Explanation of Additional Financial Information Shown on Lines 43 and 50 through 52 of Attachment 1 to Appendix F.

Line 43 – Capital Lease Obligations – Costs recorded as a capital lease for KCPL’s obligations related to the 345 KV Missouri-Iowa-Nebraska Transmission line under a coordination agreement with seven regional utilities.

Line 50 – Operating Lease Debt Equivalent – Present value of future lease payments for various operating leases including railcars, the 345 KV line from Wolf Creek to LaCygne and facilities for 1201 Walnut and 801 Charlotte.

Line 51 – Purchase Power Debt Equivalent – Present value of purchased power capacity obligation.

Line 52 – Accounts Receivable Sale - Maximum amount of borrowing under a receivables securitization agreement.

Transactions included in the amounts above are subject to review by the Commission for prudence. Amounts determined to be not prudent will not be included in the calculation of the financial ratios for purposes of adjusting the amortization amount. The prudence and reasonableness of these transactions will be determined in KCPL’s next general rate case.

The illustration does not include the effect of SO2 sales on cash flow because currently these sales have not occurred. To the extent actual SO2 sales occur, these sales will be included as cash flow for purposes of Appendix F and whether the resulting projected cash flow meets the ratio values.

Attachment 1 to Appendix F					
Line		Total Company	Jurisdictional Allocation	Jurisdictional Adjustments	Jurisdictional Proforma
Information from the Company's annual Surveillance Report					
7	Rate Base	Surveillance Report Schedule 1, Column 603 & 604, Line 0260	2,214,826	1,182,007	
8	Jurisdictional Allocator for Capital	Jurisdictional Rate Base / Total Company Rate Base		53.4%	
9					
10	Total Capital	Surveillance Report Capitalization Worksheet	2,237,339	1,194,021	-
11	Equity	Surveillance Report Capitalization Worksheet	1,109,125	591,917	-
12	Preferred	Surveillance Report Capitalization Worksheet	0	0	0
13	Long-term Debt	Surveillance Report Capitalization Worksheet	1,128,214	602,104	602,104
14	Cost of Debt	Surveillance Report Capitalization Worksheet	5.68%	5.68%	5.68%
15	Interest Expense	Line 13 * Line 14	64,056	34,185	-
16					
17	Retail Sales Revenue	Surveillance Report Schedule 2, Line 0040	882,766	470,668	19,569
18	Other Revenue	Line 19 - Line 17	172,134	91,212	91,212
19	Operating Revenue	Surveillance Report Schedule 1, Line 0010	1,054,900	561,880	19,569
20					
21	Operating & Maintenance Expenses	Surveillance Report Schedule 1, Line 0040	537,391	312,380	
22	Depreciation	Surveillance Report Schedule 1, Line 0050	134,792	75,744	
23	Amortization	Surveillance Report Schedule 1, Line 0060	11,533	6,340	19,569
24	Interest on Customer Deposits	Surveillance Report Schedule 1, Line 0065	0	379	
25	Taxes other than income taxes	Surveillance Report Schedule 1, Line 0070	95,495	31,009	
26	Federal and State income taxes	Surveillance Report Schedule 1, Line 0080	86,605	38,669	0
27	Gains on disposition of plant	Surveillance Report Schedule 1, Line 0085	34	0	0
28	Total Electric Operating Expenses	Sum of Lines 21 to 27	865,851	464,520	19,569
29					
30	Operating Income	Surveillance Report Schedule 1, Line 0120	189,049	97,360	0
31	less Interest Expense	- Line 15	(64,056)	(34,185)	-
32	Depreciation	Surveillance Report Schedule 1, Line 0050	134,792	75,744	-
33	Amortization	Surveillance Report Schedule 1, Line 0060	11,533	6,340	19,569
34	Deferred Taxes	Surveillance Report Schedule 7, Column 601, Line 0550	30,923	16,503	(7,562)
35	Funds from Operations (FFO)	Sum of Lines 30 to 34	302,241	161,762	12,006
36					
37	Net Income	Line 30 + Line 31	124,993	63,175	-
38	Return on Equity	Line 37 / Line 11	11.3%	10.7%	0.0%
39	Unadjusted Equity Ratio	Line 11 / Line 10	49.6%	49.6%	0.0%
Additional financial information needed for the calculation of ratios					
43	Capitalized Lease Obligations	KCPL Trial Balance accts 227100 & 243100	2,402	1,282	
44	Short-term Debt Balance	KCPL Trial Balance accts 231xxx	-	-	
45	Short-term Debt Interest	KCPL T.B. accts 831014, 831015, 831016	560	299	
Adjustments made by Rating Agencies for Off-Balance Sheet Obligations					
49	Debt Adjustments for Off-Balance Sheet Obligations				
50	Operating Lease Debt Equivalent	Present Value of Operating Lease Obligations discounted @ 10%	76,800	40,987	
51	Purchase Power Debt Equivalent	Present Value of Purchase Power Obligations discounted @ 10%	25,000	13,342	
52	Accounts Receivable Sale	KCPL Trial Balance account 142011	70,000	37,358	
53	Total OBS Debt Adjustment	Sum of Lines 50 to 52	171,800	91,686	-
54					
55	Interest Adjustments for Off-Balance Sheet Obligations				
56	Present Value of Operating Leases	Line 50 * 10%	7,680	4,099	-
57	Purchase Power Debt Equivalent	Line 51 * 10%	2,500	1,334	-
58	Accounts Receivable Sale	Line 52 * 5%	3,500	1,868	-
59	Total OBS Interest Adjustment	Sum of Lines 56 to 58	13,680	7,301	-
Ratio Calculations					
63	Adjusted Interest Expense	Line 15 + Line 45 + Line 59	78,296	41,785	-
64	Adjusted Total Debt	Line 13 + Line 43 + Line 44 + Line 53	1,302,416	695,072	-
65	Adjusted Total Capital	Line 10 + Line 43 + Line 44 + Line 53	2,411,541	1,286,989	-
66					
67	FFO Interest Coverage	(Line 35 + Line 63) / Line 63	4.86	4.87	0.29
68	FFO as a % of Average Total Debt	Line 35 / Line 64	23.2%	23.3%	1.7%
69	Total Debt to Total Capital	Line 64 / Line 65	54.0%	54.0%	0.0%
Changes required to meet ratio targets					
73	FFO Interest Coverage Target		3.80	3.80	0.00
74	FFO adjustment to meet target	(Line 73 - Line 67) * Line 63	(83,012)	(44,764)	(12,006)
75	Interest adjustment to meet target	Line 35 * (1 / (Line 73 - 1) - 1 / (Line 67 - 1))	29,647	15,987	4,288
76					
77	FFO as a % of Average Total Debt Target		25%	25%	0%
78	FFO adjustment to meet target	(Line 77 - Line 68) * Line 64	23,363	12,006	(12,006)
79	Debt adjustment to meet target	Line 35 * (1 / Line 77 - 1 / Line 68)	(93,452)	(48,026)	48,026
80					
81	Total Debt to Total Capital Target		51%	51%	0%
82	Debt adjustment to meet target	(Line 81 - Line 69) * Line 65	(72,530)	(38,708)	-
83	Total Capital adjustment to meet target	Line 64 / Line 81 - Line 65	142,216	75,898	-
Amortization and Revenue needed to meet targeted ratios					
87	FFO adjustment needed to meet target ratios	Maximum of Line 74, Line 78, or Zero	23,363	12,006	(12,006)
88	Effective income tax rate	Surveillance Report Schedule 7, Line 0370 / Line 0160	38.57%	38.64%	38.64%
89	Deferred income taxes *	- Line 87 * Line 88 / (1 - Line 88)	(14,670)	(7,562)	-
90	Total amortization required for the FFO adjustment	Line 87 - Line 89	38,033	19,569	(19,569)
91					
92	Retail Sales Revenue Adjustment	Adjustment = Sum(Line 21 to Line 25) + Line 27 - Line 18 - Line 31 + (Line 11 * Line 38) / (1 - Line 88)		470,668	19,569
93	Percent increase in retail sales revenue	Line 92 Jurisdictional Adjustments / Line 92 Jurisdictional			4.2%
* Adjusted for known and measurable changes including changes related to new plant in-service					

Kansas City Power & Light Company
Depreciation & Amortization Rates
Missouri Jurisdictional

Account	Acct. No.	Avg. Service Life	Net Salvage	Deprec. Rate
Total Steam Production (Note)				
Structures & Improvements	311	30.5	-1.0%	3.31%
Structures & Improv – Haw 5 Rebuild	311			0.82%
Boiler Plant Equipment (incl trains)	312	28.6	-4.0%	3.63%
Boiler Plant Equip – Haw 5 Rebuild	312			0.90%
Turbogenerator Units	314	32.3	-1.0%	3.13%
Accessory Electric Equipment	315	31.3	-1.0%	3.23%
Accessory Electric Equip – Haw 5 Rebuild	315			0.80%
Acc Electric Equip – Computers (like 391)	315	18.4	1.0%	5.40%
Miscellaneous Power Plant Equipment	316	28.0	2.0%	3.50%
Misc Power Plant Equip – Haw 5 Rebuild	316			0.87%
<u>Total Nuclear Production (Note)</u>				
Structures & Improvements	321			1.55%
Reactor Plant Equipment	322			1.73%
Turbogenerator Unites	323			1.96%
Accessory Electric Equipment	324			1.73%
Miscellaneous Power Plant Equipment	325			2.36%
Nuclear Plant Write-Off	328			1.73%
Total Combustion Turbines				
Structures & Improvements	341	24.3	0.0%	4.12%
Fuel Holders, Producers, & Acc. Equip.	342	24.3	0.0%	4.12%
Generators	344	24.3	0.0%	4.12%
Accessory Electric Equipment	345	24.3	0.0%	4.12%
<u>Total Wind Generation</u>				
Structures & Improvements	341	20.0		5.00%
Generators	344	20.0		5.00%
Accessory Electric Equipment	345	20.0		5.00%
Total Transmission Plant				
Structures & Improvements	352	73.5	0.0%	1.36%
Station Equipment	353	42.0	6.0%	2.24%
Station Equip-Communication Equip (like 397)	353	38.8	3.0%	2.50%
Towers & Fixtures	354	50.0	0.0%	2.00%
Poles & Fixtures	355	39.0	-40.0%	3.59%
Overhead Conductors & Devices	356	48.0	-49.0%	3.10%

Underground conduit	357	75.5	0.0%	1.32%
Underground Conductors & Devices	358	39.2	0.0%	2.55%
Total Distribution Plant				
Structures & Improvements	361	33.8	0.0%	2.96%
Station Equipment	362	45.0	10.0%	2.00%
Station Equip-Communication Equip (like 397)	362	38.8	3.0%	2.50%
Poles, Towers, & Fixtures	364	32.0	-31.0%	4.09%
Overhead Conductors & Devices	365	41.0	17.0%	2.02%
Underground Conduit	366	75.3	0.0%	1.33%
Underground Conductors & Dev	367	65.0	20.0%	1.23%
Line Transformers	368	30.0	7.0%	3.10%
Services	369	33.8	-6.0%	3.14%
Meters	370	23.6	-2.0%	4.31%
Install on Customers' Premises	371	10.9	-4.0%	9.51%
Street Lighting & Signal Systems	373	24.4	10.0%	3.69%
Total General Plant				
Structures & Improvements	390	39.4	0.0%	2.54%
Office Furniture & Equipment	391	18.4	1.0%	5.40%
Transportation Equipment	392	13.3	28.0%	5.43%
Stores Equipment	393	27.1	3.0%	3.58%
Tools, Shop & Garage Equipment	394	37.5	2.0%	2.61%
Laboratory Equipment	395	29.4	1.0%	3.37%
Power Operated Equipment	396	16.2	10.0%	5.55%
Communication Equipment	397	38.8	3.0%	2.50%
Miscellaneous Equipment	398	31.3	1.0%	3.16%

Notes: Nuclear Production rates are based on a lifespan under a 60-year license using remaining life rates. Rates are identical to Kansas jurisdictional rates.

Rates for Steam Production Plant related to Hawthorn Unit 5 Rebuild plant reflect Missouri jurisdictional rates after consideration of insurance and subrogation recoveries recorded in Account 108, Accumulated Provision for Depreciation. Future depreciation studies will use remaining life rates.

AMORTIZATION OF LIMITED TERM & OTHER ELECTRIC PLANT

Account	Acct. No.	Avg. Service Life	Net Salvage	Deprec. Rate
Intangible – Five Year Software	303	5.0	0.0%	20.0%
Intangible – Ten Year Software	303	10.0	0.0%	10.0%
Intangible – Communication Equip (like 397)	303	38.8	3.0%	2.50%
Intangible – Accessory Equip (like 345)	303	24.3	0.0%	4.12%
Steam Prod–Structures & Impr-Leasehold Impr	311	Lease		
Combustion Turbine Plant – Land Rights	340			1.19%
Transmission Plant – Land Rights	350			1.19%
Distribution Plant – Land Rights	360			2.17%
General –Structures & Impr-Leasehold Impr	390	Lease		

In-Service Test Criteria

Coal Plant In-Service Test Criteria

1. Unit must demonstrate that it can operate at its design minimum load or above.

$$\text{Hours at or above design minimum load} / 400 \text{ hours} \geq 0.80$$

2. Unit must be able to operate at or above its design capacity factor for a reasonable period of time. If the design capacity factor is not specified it will be assumed to be 0.60 unless the utility can offer evidence justifying a lower value.

$$\text{Design capacity factor} \leq \frac{\text{energy generated for a continuous period of 168 hours}}{(\text{design full load} \times 168 \text{ hours})}$$

3. Unit must operate at an average capacity equal to 98% of its design maximum continuous rating for four (4) hours.

4. Unit must be operated so as to show a clear and obvious trend toward the predominate use of coal as its primary fuel. Test period will be thirty (30) days. The following items will be used as an indication of the trend for coal operation:

- a) Boiler control tuning completed such that the unit can operate safely with all control systems in auto.
- b) Ash build up in the furnace and backpass areas shall be monitored and be within expected levels.
- c) All boiler/turbine interlocks shall be proven to work as designed.
- d) Sootblowing timing and sequences shall be set properly to clean the tube areas.
- e) All critical alarms brought into the control room shall be operational and functioning properly.

- f) At the end of the test period, oil burn levels, if applicable, will be at or near design levels while burning coal.
 - g) Oil ignitors are functioning in accordance with specifications.
- 5. Unit must have successfully completed all major equipment startup test procedures.
 - 6. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the newest unit is declared fully operational and used for service.
 - 7. Sufficient transmission facilities shall exist for KCPL's share of the total plant design net electrical capacity from the generating station into the KCPL service territory at the time the newest unit is declared fully operational and used for service.
 - 8. Equipment installed to comply with emission requirements shall be operational and demonstrate the ability to remove 93% or more of the NOX, SO₂, particulate, and mercury emissions they were installed to remove over a continuous four (4) hour period while operating at or above 95% of its design load. This equipment shall also be required to demonstrate that it is able to remove 88% or more of these same emissions it was installed to remove over a continuous 120 hour period while operating at or above 80% of its design load.

Wind Turbine In-Service Test Criteria

- 1. All major construction for each of the units to be considered for inclusion in rate base shall be completed.
- 2. All preoperational tests for each of the units to be considered for inclusion in rate base shall be completed.
- 3. Unit has operated at several different wind speeds and delivered power output near or in excess of anticipated output based on guaranteed power curve while vibrations are within design

limits. The analysis necessary to meet this requirement will involve: 1) taking the guaranteed power curve for each of the unit types and dividing the range of design wind speeds into three (3) equal ranges of wind speeds, 2) reviewing wind speed data vs power output for each of the units being evaluated, 3) confirming that each of the units being evaluated had a power output of 95% or more of guaranteed output for the wind speed observed in at least two (2) of the three (3) wind speed ranges noted above with at least one point at or above the 50% design wind speed, and 4) confirming that each of the units being evaluated did not exhibit any unusual vibration outside of design specification requirements.

4. The operational testing required in item 3 above shall be conducted on the first five (5) units constructed and if all five (5) operate in an acceptable manner as described in item 3 above, testing will only be required on every other unit built thereafter at each particular wind generation site utilizing these exact unit types. If any of the units tested during the period where every other unit is being tested fails to operate in an acceptable manner as described in item 3 above, the next five (5) units installed will be required to be tested and operate in an acceptable manner as described in item 3 above before testing can resume on an every other unit basis again.

5. Unit rotor lock or break has been checked and confirmed to be installed correctly for each of the units to be considered for inclusion in rate base.

6. Sufficient transmission interconnection facilities shall exist to carry the total net electrical capacity from the completed number of generating units into the distribution/transmission system.

7. Only units that have been constructed and are operating in an acceptable manner as described in item 3 above shall be considered for inclusion in rate base. Units under construction

or that have been constructed but have not met these in-service criteria will not be considered for inclusion in rate base, until such time units have met in-service criteria.

Combustion Turbine Unit In-Service Test Criteria (Nameplate Capacity of 95 MW or Less)

1. All major construction is completed.
2. All pre-operational tests have been successfully completed.
3. Unit will successfully demonstrate its ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to base load when prompted at a location (or locations) from which it will be normally operated.
4. If unit has fast start capability, unit will demonstrate the ability to meet fast start criteria.
5. Unit will successfully demonstrate the ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it will be normally operated.
6. Unit will successfully demonstrate the ability to operate at minimum load for one (1) hour.
7. Unit will successfully demonstrate the ability to operate at or above 98% of peak load for one (1) hour, after adjusting for ambient conditions.
8. Unit will successfully demonstrate its ability to operate at or above 98% of base load for four (4) continuous hours, after adjusting for ambient conditions.
9. Unit will successfully meet all operational guarantees.
10. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the newest unit is declared fully operational and used for service.

11. Sufficient transmission facilities shall exist for KCPL's share of the total plant design net electrical capacity from the generating station into the KCPL service territory at the time the newest unit is declared fully operational and used for service.

Combined Cycle Unit In-Service Test Criteria

1. Major construction work, and pre-operational tests have been successfully completed such that the combined cycle unit may be operated and successfully complete criteria items 2 through 7.

2. All contract performance guarantee testing will be successfully performed in accordance with the contracts for the combustion turbine, the steam turbine, and the heat recovery steam generators.

3. The combined cycle unit will demonstrate its ability to startup from turning gear operation to nominal capacity on natural gas fuel when prompted by the operator.

4. The combined cycle unit will demonstrate its ability to shut down from minimum load resulting in turning gear operation when prompted by the operator.

5. The combined cycle unit will demonstrate its ability to operate at minimum load for one (1) hour on natural gas fuel.

6. The combined cycle unit will demonstrate its ability to operate at or above 95% of nominal capacity for four (4) continuous hours on natural gas fuel, after adjusting for ambient conditions. During this test the unit will demonstrate its ability to operate at or above 98% of its nominal capacity for one (1) hour, after adjusting for ambient conditions.

7. The combined cycle unit must be able to operate at or above its design capacity factor for a reasonable period of time. If the design capacity factor is not specified it will be assumed to be 0.60 unless the utility can offer evidence justifying a lower value.

Design capacity factor $\leq$ energy generated for a continuous period of 168 hours / (design full load x 168 hours)

8. Sufficient transmission facilities shall exist to carry the total design net electrical capacity of the combined cycle unit to KCPL's distribution/transmission system.

9. Combustion turbine unit which is equipped to operate in any of the following modes will demonstrate its ability to operate in the applicable modes before the equipment costs associated with these operation modes will be considered for inclusion in rate base.

- a) Generator operating as a synchronous condenser at rated speed and turbine operating at turning gear speed.
- b) Startup of gas turbine driven by the generator and frequency converter.
- c) Shutdown of gas turbine alone without the generator.

In-Service Criteria for Unit Which is Operational

1. Unit must have adequate recent operational history (January 2003 through December 2005). Unit shall be considered for this review if the unit has been operational for at least six (6) months and has at least 500 hours of operation.

2. Staff will review all unit operational data available to determine if a specific in-service test criterion can be met without operating the unit.

3. If data is inadequate, the unit will be run to meet the specific deficient in-service test criterion.

Requirements of the Missouri Class Cost of Service Study to Be Provided With Rate Filing #1

I. Rate Classes to be Used in Missouri Class Cost of Service Study

Residential

Small General Service

Medium General Service

Large General Service

Large Power Service

Lighting & other customers to which known costs are assigned and other costs are allocated

II. Work Products

1. Functionalized Costs

KCPL will provide a summary of actual costs by functional category and FERC account* for the 12 months ending September 2005. Each functional category is defined by the allocation factor that is applied to the costs in that category; thus, there is a one-to-one correspondence between the functional cost categories and the allocation factors used in a class cost-of-service study.

*This includes all plant accounts, depreciation expense, depreciation reserve, all expenses, and revenues.

2. Hourly Class Load Data

KCPL will provide hourly rate class load data for summer 2004 through September 2005.

3. Monthly Rate Class Load Characteristics

KCPL will provide each of the following work-products in three versions

Version #1: 12 months actual ending September 2005; Version #2: weather-normalized (at meter voltage); and Version #3: weather-normalized (at each voltage level from meter to generator):

- a) coincident peak demands
- b) non-coincident (class peak) demands by delivery voltage*
- c) customer maximum demands by delivery voltage*, also the annual customer maximum demand
- d) monthly kWh sales by billing month and by delivery voltage level*

*delivery voltage relates to ownership of facilities (e. g., “secondary” refers to KCPL ownership of the transformation equipment required to transform electricity from a primary voltage to a secondary voltage ; “primary” refers to customer ownership of said transformation equipment)

4. Revenue and Billing Units

KCPL will provide each of the following work products in two versions:

Version #1: 12 months ending September 2005; Version #2: weather-normalized (at meter voltage):

- a) billing units by billing month and by the voltage groupings shown on KCPL's current rate schedules
- b) rate revenues by rate class

5. Allocation Factors

KCPL will provide the allocation factors based on 12 months ending September 2005, and the derivation of such factors that correspond to each of the functional cost categories used in a class cost-of-service study.

6. Special Cost Studies

KCPL will provide the following special studies:

- a) Primary/secondary split of distribution investment contained in FERC accounts #364-#367
- b) Customer/demand split of distribution investment contained in FERC accounts #364-#368
- c) Meter cost study (typical installed meter and associated replacement cost)
- d) Service Line cost study (typical installed service line and associated replacement cost)
- e) Meter reading
- f) Billing
- g) Losses (load and no-load)

7. Individual Customer Billing Data

KCPL will provide all monthly billing data for individual accounts that were served under either the Large Power or Special Contract rate schedules at any time during the 12 months ending September 2005.

8. Work Papers

KCPL will provide Staff and OPC complete copies of the work papers relating to all of the above items. KCPL will also make copies of any or all of these workpapers available upon request to other parties to this agreement. Work papers should include both the input data and the computations in sufficient detail that the Company's results are replicable by technical experts from the signatory parties. The work papers should be in an electronic, preferably EXCEL spreadsheet, format with all formulas intact.